

IN THE CLAIMS

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-14. (Canceled)

15. (Previously presented) The method of claim 30, wherein measuring the amount of HRF protein includes:

(a) contacting a sample from a subject with a support on which a first antibody has been immobilized, the first antibody being capable of binding to a first epitope of HRF protein;

(b) after step (a), washing the support with a reagent so as to remove unbounded components;

(c) contacting a second antibody with the support washed in step (b), the second antibody being capable of binding to a second epitope of HRF protein and including a labeling substance; and

(d) measuring a signal of the labeling substance; and
wherein comparing the amount of HRF protein includes comparing the signal measured in step (d) with that of the control, the signal measured in step (d) reflecting the amount of HRF protein in the sample from the subject in step (a).

16. (Canceled)

17. (Previously presented) The method of claim 15, wherein at least one of the first and second antibodies are obtained by using a peptide containing a sequence of 5 to 20 amino acid residues selected from the amino acid sequence at positions 90 to 130 of SEQ ID NO: 2, the peptide being an immunizing antigen.

18-29. (Canceled)

30. (Currently Amended) A method of diagnosing a condition in a subject using a molecular marker, endometriosis, a disease caused by endometriosis in a subject the molecular marker being histamine releasing factor (HRF) protein, comprising:

measuring an amount of ~~histamine-releasing factor (HRF)~~ protein in a sample from the subject; and

comparing the amount of HRF protein in the sample from the subject with an amount of HRF protein in a normal control, and

determining if the subject has the condition based on the comparison.

wherein an increase in the amount of HRF protein in the sample from the subject as compared to the amount of HRF protein in the normal control (1) indicates that the subject has the condition, the condition being (1) endometriosis, (2) a disease caused by endometriosis, or (3) a risk for endometriosis or a disease caused by endometriosis, the disease caused by endometriosis being dysmenorrhea, infertility or adenomyosis uteri ~~endometriosis or a disease caused by endometriosis in the subject or (2) correlates with risk for endometriosis or a disease caused by endometriosis in the subject.~~

31. (Currently Amended) The method of claim 30, wherein the normal control is a sample from a subject that (1) does not have endometriosis or a disease caused by endometriosis or (2) is not at risk for endometriosis or a disease caused by endometriosis.

32. (New) The method of claim 17, wherein the peptide containing a sequence of 5 to 20 amino acid residues selected from the amino acid sequence at positions 90 to 130 of SEQ ID NO: 2 is at positions 101 to 116 of SEQ ID NO: 2.